Prince Edward Island CANADA

Agriculture and Forestry

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Agricultural Business Profile on Organic Potatoes

This profile has been compiled as a source of information for those who may be considering growing organic potatoes as a commercial venture. The reader is cautioned that the information provided should be considered as a starting point only. It does not substitute for a business plan; a business plan incorporates specific information unique to the investor. The preparation and evaluation of a business plan are critical steps that must be taken before any significant investment is made. While every effort has been made to ensure the accuracy of the information provided, the reader is further cautioned that information critical to his or her business plan should be verified. Particular attention should be paid to information that may become dated.

Abstract

Potatoes are well adapted to growth in Prince Edward Island. The cultivation of organic potatoes is an option available to current growers and new entrepreneurs wanting to take advantage of a growing market demand. Certification bodies regulate organically grown food using a set of standards based on generally accepted organic principles. Like conventional growers, organic growers must deal with controlling Late Blight and the Colorado Potato Beetle, two of the major pest problems when growing potatoes. The growth in market demand is expected to result in increased acreage of organic potatoes grown in the Atlantic region.

Background

Organic agriculture relies on natural products and processes to grow crops, improve soil quality, control pests and promote biodiversity. The term organic refers only to the process used to produce the food, rather than making guarantees about the food itself. Thus, organic is a process claim rather than a product claim.

Organic agriculture is an alternative to conventional agriculture that is holistic and ecological in approach. The guiding principle of organic production is the maintenance of sustainable ecosystems for people, animals, crops and soil. Although the term organic has been widely used since the 1940's, it was not until the late 1970's that certification programs began to develop to protect the original meaning of organic from being diluted and misused in the marketplace.

During the past decade the steady increase in demand for organic food has stimulated a growing interest in organic farming. The Canadian Farm Business Management Council (CFBMC) attributes this interest to a growing market, the spiraling cost for chemical pesticides and fertilizers, and general environmental and health concerns.[1] As well, the advent of genetically modified food has contributed to heightened interest in organic production.

Commodity and region-specific target market information should be obtained when developing individual marketing plans. The typical organic consumer is twenty to forty years of age, has higher than average income, and is very likely to be a repeat customer.[2] These consumers are highly brand loyal[3] and tend to purchase organic products for their healthfulness and environmental friendliness.[4]

Today, the North American market for all organic products is three billion dollars annually with a growth rate of twenty-five percent per year.[5] Canadian organic producers, processors and distributors make up a group of about 1,575 certified organic business units. Half of these are located in central Canada, thirty percent in the Prairies, fifteen percent in British Colombia, and four percent in the Atlantic Region.[6]

There were nineteen certified organic farms on PEI in 1998.[7] Three of these specialized in the production of certified organic potatoes, growing approximately seventy-five acres.

Certification

National Standard of Canada

The National Standard of Canada for Organic Agriculture, unveiled by the government of Canada in June, 1999, clarifies the definition of organic and

outlines the principles of organic agriculture. The principles endorse production and management practices that contribute to the quality and sustainability of the environment and ensure ethical treatment of livestock. The National Standard will allow for a clearer definition of what qualifies as organic agri-food products for export and may serve as a regulatory tool for domestic and international trade.[8]

Organic food products that bear the certification mark of the Canadian Organic Advisory Board Inc. tell consumers that those food products are produced in Canada in accordance with the principles and guidelines of the National Standard.

Certification Bodies
The purpose of a certification body is to provide, administer and control organic standards which assure consumers that the product they are buying is indeed organically produced. In 1999, Canada operated under forty-seven self-administered organic certification bodies.

PEI organic farmers can currently choose from the following two certification bodies:

The Organic Crop Improvement Association of PEI (OCIA-PEI) has an international scope and is affiliated with chapters in six Canadian provinces. The OCIA standards were used as the fundamental basis for the development of the National Standard for Organic Agriculture.

The Maritime Certified Organic Growers Co-op Ltd. (MCOG) is a regional certification body based in New Brunswick. This body has certified farms in each of the three Maritime Provinces.

Transition Period
Certification bodies have developed standards for the transition from conventional land to certified organic land. Generally, transition requires that the farmer discontinue use of prohibited chemical products for a minimum of three years. This period may be extended or reduced by the certification committee.

While the entire farm may be converted at once, it is usually recommended that conversion be accomplished gradually. A gradual transition will help maintain production and minimize financial risk while the farmer learns new management skills.

Some weed and insect problems may be expected when pesticides are withdrawn from use. The transition period should be used to break pest cycles. When beginning the transition, farmers may find it easier to begin with a rotational crop other than potatoes.

There are specific time requirements for total conversion from conventional to organic farming. The OCIA standards require that a farm be totally converted within eight years. The National Standard requires that farmers meet the standards of their individual certification body.

Audit Trail
The National Standard for Organic Agriculture defines an audit trail as: "A documentation control procedure that is sufficient to determine the origin, transfer of ownership and transportation process (i.e. supply chain) of any product labeled as organic or containing organic ingredients."[9] Audit trail documentation could include, for example, field maps, field record summaries, processing plans and product labels.

Production

Prince Edward Island has a history of potato production dating back to the eighteenth century. The province's cool humid climate with generally well distributed rainfall, length of growing season, and soil structure are well suited to potato production. In addition, cold winters with ground frost assist in the control of potato pests and diseases. Conventional potato production has evolved to take advantage of economies of scale, labour saving benefits afforded by mechanization, synthetic fertilizers, and crop protection products.

Some concepts of organic production such as disease and insect avoidance strategies, the use of resistant varieties, crop rotations, and practices to maintain soil fertility are accepted, in whole or in part, by conventional potato producers. While organic potato production requires the production of potatoes without the use of synthetic pesticides or synthetic fertilizers, it does allow the limited use of naturally produced crop protection materials, and provides for a range of soil amendment and fertility practices. Production methods for organic operations tend to be more labour and management intensive and may involve higher risks of crop damage.

The *Atlantic Canada Potato Guide (Publication 1300)*[10], which provides information on the principles of potato production and storage for conventional potato producers in this region, will be of benefit to those involved in organic potato production. The *Potato Crop: Variety, Weed and Pest Control Guide* (Publication 1300 A)[11], an annual supplement to the Atlantic Canada Potato Guide, contains a list of potato varieties currently registered in Canada. Many of these varieties have a unique appeal for smaller scale production and direct marketing.

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The quantity of seed required for planting is influenced by several factors including the spacing between rows, the desired spacing between plants within the row, and the size of seed tuber or seed piece planted.

Potato production on Prince Edward Island has evolved to use a standard thirty-six inch row spacing. While other row spacings and configurations are possible, virtually all planting, cultivation, spraying, and harvest equipment is commonly set to this standardized spacing.

The spacing of the set or seed piece within the row can vary according to variety and intended end use. For the production of seed and table potatoes, sets are usually planted from eight to twelve inches apart. For the production of potatoes for processing into frozen french fries, sets may be spaced sixteen to eighteen inches apart.

Either whole tubers or, more commonly, large tubers cut into seed pieces called sets, are used for planting. The optimum set size is usually in the range of 1.75 to 2.25 ounces. When using whole tubers for planting it is seldom economical to use seed greater than three ounces.

Once the variety, the intended end use, and the average seed piece size has been decided, Table 1 will provide a good indication of the quantity of seed potatoes required to plant one acre. For example, a variety planted at an 8.00 inch spacing with sets each averaging 2.25 ounces would require 30.6 hundredweight of seed potatoes per acre.

Table 1. Hundredweight of seed potatoes needed to plant one acre at 36 inch rows

In-Row Spacing (Inches)	Seed Piece Weight (oz.)		
	1.75	2.25	2.75
8.0	23.81	30.6	37.41
10.00	19.04	24.5	29.93
12.00	15.87	20.4	24.94
14.00	13.6	17.5	21.38

Each year the PEI Department of Agriculture and Forestry publishes the *Seed Potato Certification List and Grower Directory*[12], which, in addition to listing seed sources, contains information on each seed class and variety that has passed field inspection standards.

Potato production using organic methods presents a number of challenges; not the least of which is the control of insects and diseases. The proximity to conventional production will also be a challenge to organic growers in the province. Organic growers will face scrutiny from nearby conventional growers concerned about the spread of diseases such as Late Blight. Nevertheless, with attention paid to insect and disease avoidance strategies, the maintenance of healthy soil, good rotations, and proper timing of pest control methods, the successful production of organic potatoes is possible.

Crop Rotation

A good crop rotation includes non-related crops that are seeded at different times and have different nutrient demands. To ensure that rotation requirements are met, consult individual certification standards. Crop rotation can improve soil fertility, build soil structure, and aid in pest control. When developing rotational plans, it is helpful to make use of cropping records and to consult with experienced organic farmers. As growers gain experience, their knowledge will grow with experimentation and observation of different rotations.

Table 2. An example of a five year rotation with potatoes.

YEAR	CROP
1	cereal under seeded with a legume
2	legume
3	potato with fall seeded rye
4	rye
5	soybean crop

Soil Fertility

The ideal soil for potato production is a fertile, deep, well-drained loam, high in organic matter. The common slogan, "feed the soil and it will feed the plants" reflects the importance of soil management on an organic farm. Organic standards prohibits the use of synthetic fertilizers. Therefore, long-term planning is required to ensure that nutrients are available to the crop and that soil quality is maintained or enhanced. Compost, cover crops, and soil amendments are three major alternate sources of fertility.

Composting is a process that transforms organic materials such as manure, straw, sawdust, garden wastes, leaves and seaweed into humus. During the composting process organic material is broken down, or digested, by naturally occurring microorganisms. Composting material left alone takes approximately three months to mature and should be black-brown in colour and have a crumbly texture when completed. Ideally, it should be spread as soon as possible after the composting process is complete. Managing levels of moisture, air and temperature by turning the compost pile

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2	legume
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can increase microbial activity and speed up the production of compost.

Optimizing the composting process involves monitoring the ratio of carbon and nitrogen (C:N) in the pile. The initial material mix should have a carbon to nitrogen ratio of 30:1. Carbon sources include straw, brown plant residue, sawdust, leaves, and garden waste. Nitrogen sources include manure, fresh grass, and blood meal. However, some materials are restricted and operators should consult with the certification body before combining material for composting. Adding three to four kilograms of nitrogen material for every one hundred kilograms of carbon should be sufficient to produce the desired result.[13] The composting process is slowed by a lack of nitrogen; conversely, too much nitrogen may generate ammonia gas and an unpleasant odor.

The use of compost has a much lower risk of causing pollution or nuisance complaints than raw livestock manure. Choosing a flat site with minimal water flow in and out of the compost area can reduce the risk of water contamination from nitrates, ammonia, phosphorus, and pathogens.

Compost can be applied as a preseason soil conditioner, as a mulch or fertilizer during the growing season, or in the fall to help decompose cover crops. The slow, steady release of nutrients from compost improves the soil's biological, chemical and physical properties.

Cover Crops are often called green manures, are grown specifically to be plowed or tilled under. Cover crops can reduce soil erosion, frost penetration, and nutrient leaching while improving soil tilth and pest control. However, some cover crops are hosts to potato pests. For example, buckwheat is a host for the fungus, *Rhizoctonia solani*. Therefore, care should be taken when selecting a cover crop. The crop should suited to the soil, the crop rotation, the pest management practices and the needs of the main rotational crop.

Soil Amendments are natural rock forms of minerals, such as slow-acting rock powders, can be mixed with the soil or added directly to compost. Although micronutrient fertilizers can be sprayed on plant leaves, there is limited absorption. Foliar applications of micronutrients are used primarily to treat specific nutrient deficiencies in a crop. Biological fertility agents promote the development of beneficial bacteria in the soil that can improve nutrient release and soil structure. For example, adding specific Rhizobia bacteria to legumes will encourage nitrogen fixation.

Potatoes grow well in slightly acidic soil with pH levels of 5.5 to 6.0 while most other rotational crops favor a soil that is less acidic. Acidic soil conditions can be improved through application of limestone. Lime is a cost effective soil amendment that reduces the soil's acidity by raising its pH level. Lime is applied after the potato harvest to prepare the soil for the rotational crops. The frequency of lime applications should be based on soil tests.

Pest Management

Effective pest management begins with the use of pest tolerant varieties of certified seed potatoes. Because organic certification prohibits the use of all synthetic pesticides, a variety of alternative pest control methods or management practices are employed by growers. These include organic pesticides, cover crops, crop rotation and diversification, water management, crop scouting, disposal of diseased plants, insect vacuuming and trapping, reducing insect host alternate species and encouraging beneficial insect populations.

The greatest pest challenges for organic potato farmers are Late blight, Colorado potato beetles, aphids, and weeds.

Late Blight is a devastating fungal disease that spreads rapidly under wet, humid, and windy conditions. It can cause rapid defoliation, plant death, yield loss, and tuber infections. In organic production copper sulfate, or bluestone, is the most commonly used preventative fungicide. If potato plants become infected, they should be sprayed with bluestone and destroyed either by removal from the field or by discing the plant material into the soil. Tubers harvested from infected plants should be separated from disease free tubers and should not be stored for extended periods.

Colorado Potato Beetle attack potatoes, tomatoes and eggplants. Both the larval and adult stages of the Colorado Potato Beetle feed on the plants leaves reducing the its ability to synthesize nutrients and to size tubers. Regular scouting of the field will ensure early detection.

Adult beetles overwinter in the soil, in plant residue of potato fields, and in adjacent hedgerows. In the spring the beetles move upward in the soil and walk or fly to the newly planted potato field. Crop rotation and a reasonable separation distance from previous potato fields will reduce beetle numbers and delay their arrival in the field. Also, trenches lined with black plastic that surround the field act as an insect trap. The surface of the plastic-lined trench restricts the beetles' ability to fly and they are killed by the sun's heat. Some organic farmers use propane flamers or physically remove adult beetles with specialized vacuums to control this insect. An approved insecticide for organic potato containing *Bacillus thuringiensis* may also be used.

Aphids are insects that transmit viruses from plant to plant as they probe the leaf material to suck out the juice. Viruses can be passed to new generations of plants via infected potato seed. Elevated levels of viruses decreases seed quality and yield.

Monitoring the aphid population and coating the foliage with oil sprays before aphids arrive in the season is a control practice used by organic farmers. These oil sprays deter the aphids from landing and feeding on young vulnerable potato plants. Other control options include crop rotation and early roguing.

Weeds compete with the crop for moisture, nutrients and space and can be a host for insect or disease pests. The objective of weed control in an organic production system is to prevent weed levels from reaching a population where yield is significantly reduced or harvest efficiency is affected.

Organic certification standards prohibit the use of herbicides. The primary methods of weed control are mechanical cultivation and improved soil conditions. Mechanical weed control combines preplant tillage, rotary hoeing and inter-row cultivation in a timely manner. Soil that is biologically active and has good drainage promotes the development of a healthy crop canopy that does not encourage weed growth.

Specialized Equipment

The cost of specialized equipment may be a financial challenge for smaller scale farms. Mechanical skills and creativity are profitable assets for farmers faced with these challenges. Equipment designed specifically for organic farming, such as insect vacuums and brush weeders, are expected to become less expensive and more available as the industry matures. Equipment sharing may be a feasible option.

Marketing

The organic industry is still in its infancy. Technical and market information is limited and marketing channels are just beginning to develop. Effective marketing at this introductory stage generally means increased levels of marketing effort are required to develop market channels.

Local Market

The small and growing local market exhibits trends similar to the global organic industry. Local grocery retailers have been able to sell organic potatoes at premiums of one hundred to three hundred percent.[14] It is important to recognize that these price premiums will reduce as the market matures and competition develops.

National Market

Consumer demand for organic products, often called "Green Consumerism," is creating substantial, consistent, annual growth in the organic agri-food industry. The demand is growing so rapidly that it is not being met by current supply levels.[15] This results in price premiums ranging from ten to fifty percent for organic food.[16]

The size of the Canadian organic industry is approaching $1 billion, with annual growth of twenty percent.[17] While the industry is large and growing rapidly, it is still only one to two percent of total food sales in Canada.[18] National market expansion is occurring at rates similar to the US and several European countries. Organic farmers are no longer limited to selling produce to local farmers' markets. Organic products are now on the shelves of most of Canada's retail grocery chains.[19]

International Markets

The two largest export markets are the United States and the European Union. Both have an estimated market size of 4.5 billion US dollars and growth rates of twenty-five to thirty percent annually.[20] Phytosanitory conditions must be met to ship potatoes to many of these markets. Generally, these markets require that food be certified by a highly recognized certification body with an international scope, such as OCIA.

Currently the market demand exceeds supply. There is a great opportunity for Atlantic Canada to supply North American export markets provided support systems and marketing structures can be developed within a competitive time frame. Early market penetration offers greater opportunities for establishing long-term relationships in environments with little competition.[21]

Marketing Methods

Direct marketing includes on-farm sales, farmers' markets, community supported agriculture and consumer buying groups. PEI has farmers' markets in Charlottetown, Summerside and Kensington. Community supported agriculture and consumer buying groups are more suited to large urban markets. Community supported agriculture sell shares in advance of the harvest season. This shifts some of the financial risk for the farmer and offers the consumer an assurance of supply. A consumer buying group is a group of consumers and farmers that contract to fill weekly orders for delivery. This arrangement involves less consumer commitment, highlighting the need for superior customer relations which is key to all direct marketing endeavors.

A **Cooperative** is an autonomous, jointly- owned and democratically-controlled enterprise. It is

formed to collectively achieve common goals through economies of scale.[22] An organic agri-food co-op should possess a clear definition of quality, an empowered decision maker, and the ability to provide a consistent supply of goods. A reputable cooperative can access larger and more distant markets.[23]

Competition
Small scale PEI potato producers are currently unable to fill local demand. Consumers are not price sensitive at this time, therefore growers do not need to compete on price. Local produce managers generally prefer to buy local organic potatoes. Typically, PEI consumers will choose local organic potatoes even when a lower priced organic alternative is available.[24]

Processing

On farm processing tends to retain more of the retail sales price for the grower. Also, a relatively small amount of processing has the potential to generate substantial additional income.[25] Methods of grading conventional potatoes also apply to organic potatoes. Potatoes are sorted and packed to minimum Canadian standards in three, five, ten, twenty or fifty pound sizes. Potatoes can also be washed and packaged into count boxes for restaurants and grocery stores. Count boxes contain potatoes that are of the same shape and weight. Smaller growers wishing to achieve economies of scale may consider commercial or cooperative packaging facilities.

Although a processed product cannot be certified as organic, the product may display a certified organic logo if its ingredients are certified. A processing plan must be included in all audit trail documentation.

A variety of value added organic potato products for which consumers were paying a premium are currently being sold in North America. These include organic soups, such as cream of potato and potato leek; organic french fries; and organic baby food.

Human Resource Requirements

Generally, organic farming tends to be more labour intensive than conventional farming. Worker skill requirements will range from unskilled to highly mechanically skilled.

Wage rates would be in the range of $6 to $9 per hour, with skilled equipment tractor and truck operators possibly receiving slightly more. Producers should also be aware that in addition to the base wage, additional labour costs will include the employers' contributions to Canada Pension Plan (CPP) and Employment Insurance (EI). Participation in the Workers Compensation Plan (WCP) should also be considered. The 1999 cost for general farm workers under WCB is $3.86 per $100 of payroll.

Regulatory Issues

Certification Standards - Organic farms and processing facilities must meet the minimum requirements set out in the standards of that certification body.

Plant Health Act - This act has established strict rules that outline the quality of seed potatoes permitted to be planted and the requirements for the registration of potato acreage greater than 0.25 acres of potatoes. The act specifies the requirements for the import and planting of seed potatoes and also the disinfection requirements for the control of bacterial ring-rot. In addition, the production of seed potatoes is regulated by the Canadian Food Inspection Agency. This federal agency enforces the Seeds Act - Potato Regulations, which govern the production of seed potatoes in Canada.

Food and Drugs Act - Anyone growing organic potatoes should be concerned with this Federal Act with respect to advertising, labeling and processing. The *Guide to Food Labeling and Advertising*, published by the Canadian Food Inspection Agency should be referred to for the proper labeling and advertising of organic foods.

Pesticides Control Act - Anyone who wishes to buy or apply any pesticides, with the exception of domestically labeled products, must be certified under this act.

Environmental Protection Act - A permit must be obtained under this act to irrigate, draw water from a watercourse or well, or if a stream crossing is required to access a field or property.

Roads Act - A permit is required to install a new highway access or change an existing access.

Canada Agricultural Products Act - Anyone planning to market fresh produce inter-provincially must be in compliance with this Federal Act with respect to grades and standards.

Occupational Health and Safety Act - At the present time, farming operations which are located on property that qualifies for a farm assessment under the Real Property Assessment Act are not subject to the requirements of the Occupational

Health and Safety Act and Regulations. However, the Act and Regulations can provide excellent guidance on worker health and safety issues.

Manure Guidelines - *Guidelines for Manure Management for Prince Edward Island* [26] were established and published in 1999.

Agricultural Products Standards Act - Anyone selling organic potatoes should consult this act regarding the standards set for grading potatoes.

PEI Potato Board regulations; Board Orders - Under the Natural Products marketing Act, the PEI Potato Board has powers to promote, control and regulate the marketing of potatoes within the province. Board Orders issued by the PEI Potato Board are published in the Royal Gazette of PEI under the Natural Products Marketing Act. Each production unit (ie. growing a minimum of five acres of potatoes) is required to register with the PEI Potato Board.

Post Harvest Test - A post harvest test for the presence of viruses is required for all lots of potatoes that will be offered for sale as seed. Further information on this requirement can be obtained by contacting the Regulatory Services Section of the PEI Department of Agriculture and Forestry.

Development Costs

Development costs are estimates of setup costs and potential returns and expenses. The assumptions listed in Table 3 led to the calculation of potential machinery and building expenses (Table 4), and the contribution margin (Table 5). The scale and diversity of each organic operation should be considered when assessing these estimates.

Table 3. Assumptions used to estimate development costs

- The 25 acres of previously owned land is organically certified
- The organic certification body is OCIA
- 5 acres of potatoes grown annually
- 100 cwt. marketable yield per acre
- Custom operators are used for plowing, discing and harvesting
- Compost will be purchased from a supplier
- The storage building is built with minimal use of contractors

Setup costs for the organic production of potatoes may include land, land improvements, buildings and machinery. A land purchase may not be required if the organic production is part of an existing operation. In the case of a land purchase, capital costs could range from $1,200 to $4,500 per acre. Because there are many variables to consider, land costs have not been included in these estimates.

A composting facility is a land improvement option. It is not a requirement because compost may be purchased in PEI. Therefore, a composting facility has not been included in these setup costs.

Based on the assumptions in Table 3, the costs for a new building and equipment that may be required for an organic potato farm are listed in Table 4. The purchase of used equipment will significantly reduce the initial capital investment.

Table 4. Potential machinery and building requirements

Tractor (60 HP)	$ 60,000
Planter	40,000
Truck	25,000
Grading and packaging line	15,000
Storage building	15,000
Sprayer	7,500
Fertilizer spreader (3 pt)	1,500
Miscellaneous equipment	3,000

Potential Returns and Expenses

Statistics Canada does not currently distinguish organic production from conventional. The estimates listed in Table 5 have been adjusted from conventional potato statistics to reflect the experiences of PEI organic potato growers. OCIA certification standards were chosen because this certification body's international scope will have a higher level of recognition in export markets.

This budget is provided as a guide only. Growers must develop their own business plan. The Contribution Margin must provide funds for interest, overhead and other indirect expenses, as well as for living expenses, loan repayments, and future investment in the business.

Table 5. Calculation of the contribution margin) per acre) for organic potato production based on assumptions in Table 3.

Income ($/acre)	
Direct marketing:	
30 cwt. @ $60	$1,800
Wholesale:	
70 cwt. @ $40	2,800
Total Income	$4,600
Direct Expenses	
Shipping	$800
Farmer's Market expense	250
Certification expense	90
Custom operator expense	435
Seed	230
Fertilizer	200
Lime	15
Insecticide	35
Fungicide	35
Packaging	200
Crop insurance	50
Machinery repairs	150
Fuel expense	60
Labour	200
Total Direct Expenses	$2,750
Contribution Margin	$1,850

Key Management Issues[27]

The following questions have been designed to help interested entrepreneurs continue in their investigation of this agricultural business opportunity.

Planning - Are you prepared to develop a complete business plan for an organic potato production enterprise and to test this plan on a scale that you can afford?

Knowledge - Are you prepared to learn all you can about organic potato production and marketing by visiting existing operations, attending workshops and self-education?

Markets - Do you possess an understanding of current agricultural and organic industry conditions? Have you identified markets and buyers for your products? Have you clearly defined the marketing activities for each specific market?

Production - Have you clearly defined the production practices you will need to implement in order to produce the quality of product required by your markets?

Time - Are you aware of the amount of time you will have to devote to marketing your product and improving your production performance?

Costs - Are you aware of the resources required to establish an organic potato production enterprise and the returns that can be expected?

Risk - Are you prepared to take the risks associated with organic potato production?

Family Support - Does your family support this venture? What are the roles and expectations of each family member? How will decisions be made? How will the farm be managed?

Price Premiums - Do you have a long term plan to prepare for the possibility that price premiums may decrease as the organic industry matures?

Consumer Education - Are you willing to promote organic agriculture by educating consumers, produce managers and retailers?

Resources

PEI Department of Agriculture & Forestry
Client Service
Crops and Livestock Research Centre
440 University Avenue
Charlottetown, PEI C1A 7N3
1-800-959-8929

Canadian General Standards Board
Sales Centre
Place du Portage III, 6B1
11 Laurier Street
Hull, Quebec K1A 1G6
Tel: 1-800-665-CGSB or
819-956-0425

Prince Edward Island Business Development Inc.
Food Division
25 University Avenue
P.O. Box 910
Charlottetown, PEI C1A 7L9
902-368-6300

Trade Development Centre
2nd Floor, 75 Fitzroy Street
Charlottetown, PEI C1A 1R6
902-566-7382

Prince Edward Island Food Technology Centre
101 Belvedere Avenue
P.O. Box 2000
Charlottetown, PEI C1A 7N8
902-368-5548

Canada/Prince Edward Island Business Services Centre
75 Fitzroy Centre
P.O. Box 40
Charlottetown, PEI C1A 7K2
1-800-668-1010

Atlantic Canada Opportunities Agency
100 Sydney Street
P.O. Box 40
Charlottetown, PEI C1A 7K2
1-800-871-2596

Agriculture and Agri-Food Canada
Market and Industry Services Branch
440 University Avenue
Charlottetown, PEI C1A 4N6
902-566-7300

Research Branch
440 University Avenue
Charlottetown, PEI C1A 4N6
902-566-7300

National Research Council
80 Watts Avenue
West Royalty Industrial Mall
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